

AMENDMENTS TO THE SPECIFICATION

Please replace the second full paragraph on page 19 with the following amended paragraph:

As shown in more detail in FIG 14, the conversion circuit 102, which is shown in FIG 13 and again as circuit 200, comprises two coupled differential pairs. The differential pairs are comprised of current sources 201 and 202 operating as a first differential pair and current sources 203 and 204 operating as a second differential pair. Each pair converts a differential voltage into a differential current. The differential pairs are coupled on the receiver side and in this scheme, differential voltages A and A# come from the transmitter on the source side and B and B# come from the receiver. Current for the circuit shown in Figure 14 is provided by current source 207. Current from the first differential pair flows through resistor 205 and current from the second differential pair flows through resistor 206. The drains of the two pairs are tied together to sum these two currents to yield a single differential load current and output voltage (-,+). In this manner the conversion circuit acts as a voltage/current subtract circuit. The coupling on the receiver side, of the differential pairs of the conversion circuit 200, further ensures that the safe operating voltage of the receiver is not exceeded. Without the coupling of the differential pairs, the safe operating voltage of the input transistors could be exceeded.

Please insert the following new paragraph after the first full paragraph on page 20:

In one embodiment, differential outputs (+,-) illustrated in Figure 14 may be coupled to the differential inputs (D+, D-) illustrated in Figure 5, such that the positive

output of the differential outputs is coupled to the positive input of the differential inputs and the negative output of the differential outputs is coupled to the negative input of the differential inputs. In other embodiments, the differential outputs of Figure 14 may be coupled to the differential inputs of Figure 5 in a different manner or with intervening circuitry.

Please replace the second full paragraph on page 20 with the following amended paragraph:

Turning now to FIG 16, a logic diagram is shown that details the operation of the conversion circuit in conjunction with an edge-based receiver. Here again, signals A and A# come from the transmitter on the source side and B and B# come from a portion of the receiver not shown in Figure 16 ~~the receiver-side~~. A first differential pair comprised of current sources 401 and 402, and a second differential pair comprised of current sources 403 and 404 are coupled and summed at edge-based receiver 405, forming a voltage/current subtract circuit.